Message

From: Ozmen, Shamus [Ozmen.Shamus@epa.gov]
Sent: 3/25/2021 9:41:13 PM
To: Nguyen, Thuy [Nguyen.Thuy@epa.gov]; Lara, Rhina [Lara.Rhina@epa.gov]; Nesci, Kimberly [Nesci.Kimberly@epa.gov]
CC: Qian, Yaorong [qian.yaorong@epa.gov]; Cyran, Carissa [Cyran.Carissa@epa.gov]
Subject: RE: REVIEW: PFAS Packaging Interview with Pat R, DDL 3 PM

Many thanks Thuy. This is helpful for us to understand just internally.

Ex. 5 Deliberative Process (DP)

We greatly appreciate all the collaboration and patience with so many questions!

Thanks again,
Shamus

From: Nguyen, Thuy <Nguyen.Thuy@epa.gov>
Sent: Thursday, March 25, 2021 5:35 PM
To: Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Lara, Rhina <Lara.Rhina@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Cc: Qian, Yaorong <qian.yaorong@epa.gov>; Cyran, Carissa <Cyran.Carissa@epa.gov>
Subject: RE: REVIEW: PFAS Packaging Interview with Pat R, DDL 3 PM

Shamus
A cursory review of the lab data for Permanone 30-30 reveals lots of uncertainty and many question marks. One of which is the dilution factor in the sample analysis. There was no explanation of why the sample was diluted 1:1000 and there was no undiluted analysis of the sample. PFOA was seen in the blank at ~ 1ppt and ~ 3.5ppt in the sample, Ex. 5 Deliberative Process (DP) The reported 3500 ppt for PFOA was derived by multiplying the instrument reading (3.5 ppt) by the dilution factor (1000). Without the evidence of an undiluted analysis, there is no way for me to tell if the level of PFOA reported is actually what it is in the sample, or if it was lab contamination "magnified" by the sample dilution factor.

Ex. 5 Deliberative Process (DP)

Thuy

From: Ozmen, Shamus <Ozmen.Shamus@epa.gov>
Sent: Thursday, March 25, 2021 4:53 PM
To: Nguyen, Thuy <Nguyen.Thuy@epa.gov>; Lara, Rhina <Lara.Rhina@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Cc: Qian, Yaorong <qian.yaorong@epa.gov>; Cyran, Carissa <Cyran.Carissa@epa.gov>
Subject: RE: REVIEW: PFAS Packaging Interview with Pat R, DDL 3 PM

Thank Kimberly and Thuy.

I saw this discussion thread around steel and corrosion but it may not be related to fluorination:
https://chemistry.stackexchange.com/questions/124084/is-fluorinated-steel-corrosion-resistant-from-normal-oxidation

Also, not sure how or why they think so, but the reporter at the Baltimore Sun heard that the new PFAS data from PEER was from pesticides stored in steel drums. I didn't see steel mentioned in the related docs (attached) sent to the Administrator.

From: Nguyen, Thuy <Nguyen.Thuy@epa.gov>
Sent: Thursday, March 25, 2021 4:40 PM
To: Lara, Rhina <Lara.Rhina@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Cc: Qian, Yaorong <qian.yaorong@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Cyran, Carissa <Cyran.Carissa@epa.gov>
Subject: RE: REVIEW: PFAS Packaging Interview with Pat R, DDL 3 PM

Rhina
I have not heard fluorination used on anything else but plastic.
Fluorination is used to "strengthen" the walls of the plastic containers so they don't distort. Steel by itself is strong enough Ex. 5 Deliberative Process (DP) Chemistry wise, Ex. 5 Deliberative Process (DP)
Ex. 5 Deliberative Process (DP)

Thuy

From: Lara, Rhina <Lara.Rhina@epa.gov>
Sent: Thursday, March 25, 2021 4:34 PM
To: Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Cc: Qian, Yaorong <qian.yaorong@epa.gov>; Nguyen, Thuy <Nguyen.Thuy@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Cyran, Carissa <Cyran.Carissa@epa.gov>
Subject: RE: REVIEW: PFAS Packaging Interview with Pat R, DDL 3 PM

Hi,

Quick question – can fluorination be used for more than plastic containers? For example, steel?

Best,
Rhina M. Lara *(she/her/hers)*
Communications Branch
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Phone: (202) 815- 5722

From: Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Sent: Thursday, March 25, 2021 12:48 PM
To: Lara, Rhina <Lara.Rhina@epa.gov>
Cc: Qian, Yaorong <qian.yaorong@epa.gov>; Nguyen, Thuy <Nguyen.Thuy@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Cyran, Carissa <Cyran.Carissa@epa.gov>
Subject: RE: REVIEW: PFAS Packaging Interview with Pat R, DDL 3 PM

Comments in – no worries on the short turnaround, Rhina, I definitely have a vested interest in making sure the talking points are solid. ☺

From: Lara, Rhina <Lara.Rhina@epa.gov>
Sent: Thursday, March 25, 2021 12:06 PM

To: Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Cc: Qian, Yaorong <qian.yaorong@epa.gov>; Nguyen, Thuy <Nguyen.Thuy@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Cyran, Carissa <Cyran.Carissa@epa.gov>
Subject: REVIEW: PFAS Packaging Interview with Pat R, DDL 3 PM
Importance: High

Hi Kimberly,

I hope you're doing well! We are working on prepping for the interview with Pat R at Bloomberg and have put together some draft talking points. We have Ed making general remarks and then you introducing yourself and tackling the lab-specific questions.

Could you look these over and provide feedback by **3 PM today**? Sorry for the quick turnaround, but the interview is tomorrow so we have to move quickly!

I did highlight a few questions that will need your (or Thuy and Yaorong's) input. Let me know if you have any questions!

PFAS Packaging Interview TPs - Bloomberg

Best,
Rhina M. Lara *(she/her/hers)*
Communications Branch
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Phone: (202) 815- 5722

From: Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Sent: Wednesday, March 24, 2021 12:51 PM
To: Messina, Edward <Messina.Edward@epa.gov>; Dennis, Allison <Dennis.Allison@epa.gov>
Cc: Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Lara, Rhina <Lara.Rhina@epa.gov>; McKamey, Ann <McKamey.Ann@epa.gov>
Subject: RE: For Michal/Rick Approval: Pat R interview on PFAS Packaging Science

Are we getting questions in advance? I'm thinking that's typical procedure for these types of interviews, but not sure. Thanks.

From: Messina, Edward <Messina.Edward@epa.gov>
Sent: Wednesday, March 24, 2021 12:18 PM
To: Dennis, Allison <Dennis.Allison@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Cc: Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Lara, Rhina <Lara.Rhina@epa.gov>; McKamey, Ann <McKamey.Ann@epa.gov>
Subject: RE: For Michal/Rick Approval: Pat R interview on PFAS Packaging Science

Please lock down my calendar soon. I will need to move a meeting. 1:30pm is better.

Ed Messina, Esq.
Acting Office Director
Office of Pesticide Programs

Office of Chemical Safety & Pollution Prevention
U.S. Environmental Protection Agency
Washington, D.C.
p: (703) 347-0209

From: Dennis, Allison <Dennis.Allison@epa.gov>
Sent: Wednesday, March 24, 2021 11:41 AM
To: Messina, Edward <Messina.Edward@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>
Cc: Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Lara, Rhina <Lara.Rhina@epa.gov>
Subject: FW: For Michal/Rick Approval: Pat R interview on PFAS Packaging Science

☺ Get ready!

From: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Sent: Wednesday, March 24, 2021 11:40 AM
To: Dennis, Allison <Dennis.Allison@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Siedschlag, Gregory <Siedschlag.Gregory@epa.gov>; Hanley, Mary <Hanley.Mary@epa.gov>; Richmond, Jonah <Richmond.Jonah@epa.gov>; Tyler, Tom <Tyler.Tom@epa.gov>; Diaz, Catherine <Diaz.Catherine@epa.gov>
Subject: Re: For Michal/Rick Approval: Pat R interview on PFAS Packaging Science

No issues on my end. Thanks.

Sent from my iPhone

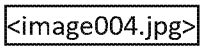
> On Mar 24, 2021, at 11:39 AM, Dennis, Allison <Dennis.Allison@epa.gov> wrote:
>
> Rick and Michal,
>
> With your support, we would like to offer up Ed and Kimberly N to provide a 15 min interview with Pat. **Ex. 5 Deliberative Process (DP)** **Ex. 5 Deliberative Process (DP)** We would like to have this interview occur this Friday either at 1:30 or 2:30 pm.
>
> Thoughts?
>
> **From:** Rizzuto, Pat <prizzuto@bloombergindustry.com>
> **Sent:** Monday, March 22, 2021 11:28 AM
> **To:** Press <Press@epa.gov>
> **Subject:** PFAS Contamination from Fluorinated Containers: Speaking to ORD or other scientist
>
> May I speak with the ORD or pesticide researchers who carried out the investigation that showed the fluorinated HDPE containers leeching or otherwise resulting in PFAS being in the pesticides? I want to better understand the process of fluorination and the hypotheses about how that could have led to the PFAS in the materials placed into the HDPE containers. If the interview has to be on background only—i.e. no name attached—let me know. It's really understanding on the science I'm after initially.
>
> : : : : : : : : : : : : : : : : : :
>
> **Pat Rizzuto**

(*she/her*)
Sr. Chemicals Reporter

Bloomberg Law's Environment Desk

Temporarily (202) 441-2729
prizzuto@bloombergenvironment.com
@patrizzuto

From: U.S. EPA Office of Chemical Safety and Pollution Prevention <oppt.epa@public.govdelivery.com>
Sent: Friday, March 5, 2021 1:59 PM
To: Rizzuto, Pat <prizzuto@bloombergindustry.com>
Subject: Pesticide Program Update: EPA Releases Testing Data Showing PFAS Contamination from Fluorinated Containers



EPA Releases Testing Data Showing PFAS Contamination from Fluorinated Containers

As the U.S. Environmental Protection Agency (EPA) pursues its mission to protect human health and the environment, addressing risks related to PFAS is a priority. To this end, EPA is making available new testing data related to PFAS found in fluorinated containers in which a mosquito control product was packaged and sold. EPA is also announcing its planned next steps to further characterize and address this potential source of contamination.

"Advancing science and taking action to reduce the health risks associated with PFAS go hand-in-hand," **said Acting Assistant Administrator for the Office of Chemical Safety and Pollution Prevention Michal Freedhoff.** "The Biden-Harris Administration's focus on developing and using the best available science will guide our decision-making, strengthen our work with stakeholders, and lead to pragmatic solutions that advance our efforts to address PFAS contamination and protect human health."

Since first becoming aware of the PFAS contamination issue in September 2020 through citizen science testing of a pesticide product, EPA has been working to investigate the source of the contamination. In December 2020, EPA studied the fluorinated HDPE containers used to store and transport the product and preliminarily determined the fluorination process used may be the source of PFAS contamination.

In January 2021, EPA continued its testing which showed the PFAS were most likely formed from a chemical reaction during the container fluorination process which then leached into the pesticide product. After completing a robust quality assurance and quality control process, EPA can confirm

that it has detected eight different PFAS from the fluorinated HDPE containers, with levels ranging from 20-50 parts per billion.

While EPA is early in its investigation, the agency will use all available regulatory and non-regulatory tools to determine the scope of this emerging issue and its potential impact on human health and the environment. It is important to note that although these types of products should not be a source of PFAS, the data indicates that the amount of PFAS that has entered the environment from the contamination in the containers the agency tested is extremely small. The agency is also committed to coordinating with the affected entities involved and their supply and distribution chains, pesticide users, the pesticide and packaging industry, and its federal, state, and tribal partners as it works through this complex health and environmental issue.

Building on the agency's initial actions announced in January 2021, EPA initiated a series of steps to tackle this issue including:

- On Jan. 13, 2021, to minimize risks to human health and the environment, EPA asked states with existing stock of the mosquito product distributed in fluorinated HDPE containers to discontinue use and hold that inventory until its final disposition is determined. The pesticide manufacturer has also notified all its customers regarding management of the product, voluntarily stopped shipments of all products in fluorinated HDPE containers, and is now using non-fluorinated containers.

- On Jan. 14, 2021, EPA issued a TSCA subpoena to the company that fluorinated the containers supplied to the manufacturer of the pesticide in which PFAS was discovered to learn more about the fluorination process used on the HDPE containers.

- EPA is aware that many companies are using fluorinated HDPE containers to store and distribute pesticide and other products. EPA is actively working with the Food and Drug Administration, the U.S. Department of Agriculture, and industry and trade organizations to raise awareness of this emerging issue and discuss expectations of product stewardship. For example, EPA is coordinating with the Ag Container Recycling Council, the American Chemistry Council, Crop Life America, the Household & Commercial Products Association, and the National Pest Management Association.

- The agency is also testing different brands of fluorinated containers to determine whether they contain and/or leach PFAS, and if so, learn the conditions affecting leaching. EPA will present these findings as expeditiously as possible.

- The agency is encouraging the pesticide industry to explore alternative packaging options, like steel drums or non-fluorinated HDPE.

To view the data and learn more, visit: https://www.epa.gov/pesticides/pfas-packaging